11/16/92



# **AT&T Door Phone Controller** Installation and Operation Manual

© 1992, AT&T All Rights Reserved Printed in U.S.A.

CIC# 999-500-315 0II722050-055 Issue 3, November 1992

#### NOTICE

Every effort was made to ensure that the information in this manual was complete and accurate at the time of printing. However, information is subject to change.

#### COMPATIBILITY

The AT&T Door Phone Controller is recommended for use with any AT&T business telephone system. It is also intended to be used with the AT&T Door Phone Speaker.

#### WARRANTY INFORMATION

AT&T provides a limited warranty to this product. Refer to "Warranty Information" in Appendix F.

Partner, Spirit, Merlin, System, Dimension, Horizon, Touch-Tone and Comkey are registered trademarks of AT&T.

# AT&T Door Phone Controller Compatibility Chart

Mode System	Dedicated Trunk Loop Start (Section 4)	Dedicated Trunk Ground Start (Section 4)	Port Saver Loop Start (Section 6) see Notes 8,7	Trunk Saver Loop Start (Section 3/6) see Note 4	Station Access Aux. Alert (Analog) (Section 5)	Station Access Auto Ringdown (Analog) (Section 5)
DIP Switches						
Home Use (single line service)	NO	NO	NO	YES	NO	NO
PARTNER	YES see Note 11	NO	YES see Notes11,12	YES see Notes 11,12	NO	NO
PARTNER PLUS	YES see Note 11	NO	YES see Notes 11,12	YES see Notes 11,12	YES	YES see Note 13
Spirit 308/616, 1224/2448	YES see Note 4	NO	YES see Notes 4,6	YES see Notes 4,6	NO	NO
Merlin 206/410/820	YES See Notes 4,5	NO	YES see Notes 4,5	YES see Notes 4,5	NO	NO
Merlin II	YES see Notes 4,5	NO	YES see Notes 4,5,9	YES see Notes 4,5,9	YES	YES
Merlin Plus	YES see Notes 4,5	NO	YES see Notes 4,5	YES see Notes 4,5	NO	NO
Merlin 1030/3070	YES see Notes 4,5	NO	YES see Notes 4,5,9	YES see Notes 4,5,9	YES	YES
System 25	YES see Notes 1,4	YES see Notes 1,4	YES see Notes 2,7	YES see Notes 2,7	YES see Note 1	YES see Not e 1
System 75 see Note 14	NO	NO	NO	NO	NO	YES
System 85 see Note 14	NO	YES see Note 4	NO	NO	YES	YES
<b>Dimension</b> see Note 14	NO	YES see Note 4	NO	NO	YES	YES
Horizon see Note 14	YES see Note 4	YES see Note 4	YES see Notes 4,6,7	YES see Notes 4,6,7	YES	YES
Comkey see Note 14	YES see Note 4	NO	YES see Note 4	YES see Note 4	NO	NO

- 1. When used in any mode of a System 25, if the user initiates a call to the door and he wishes to enter the Option Selection mode, pressing three pound keys followed by the digit 3 (i.e., # # # 3, not # # 3) must be entered. Actually, the first # does not seem to be recognized at any time during the call. However, it should be noted that only # # 3 is needed to enter the Option Selection mode when the call is initiated from the door button press.
- When sharing a trunk port on a System 25, that port must be configured as an "805" PBX/Centrex, not an "801" Loop trunk. This is the only way to transmit a hook flash to that port.
- 3. On the Merlin 1030/3070 tip and ring station application, there is a preset delay such that the Merlin system will disregard DTMF for the first 12 seconds of the connection. In this mode, users have the choice of either changing that time period or waiting for it to time out for each call.
- 4. In general, the ring-cadence option selection applies only if there is an auxiliary alert device connected. All of the EKTS/PBX's will "absorb" the ringing signal from the AT&T Door Phone Controller and generate their own ring cadence to the telephone sets.
- 5. When using the AT&T Door Phone Controller in any configuration with a Merlin System, the pound key must be pressed twice (##) for each pound (#) sent to the unit when dialing from a multi-button set.
- 6. Port Saver/Trunk Saver operation will not work for Tip/Ring sets. A switch-hook flash is not passed to the trunk port from these sets.
- 7. A trunk shared with the AT&T Door Phone Controller should not be placed in a trunk pool with other trunks.
- 8. When the AT&T Door Phone Controller shares a C.O. trunk, Trunk Saver operation is recommended.

- Tip/Ring telephone sets connected to the Merlin System through a BTMI cannot use Port Saver/ Trunk Saver operation. The BTMI will not transmit the required hook-flash signal.
- 10. System 75 requires a pound (#) to be dialed at the end of every dial string. This is required to send the dialed number to the trunk port.
- 11. Tip/Ring telephone sets cannot be used in this mode to access the AT&T Door Phone.
- 12. For PARTNER telephone sets not equipped with a Recall button, "FEATURE 03" must be dialed to send a hook-flash signal to the trunk port.
- 13. In the Ringdown mode, no number should be programmed in the AT&T Door Phone for it to dial when the door button is pressed. The PARTNER Plus system should be programmed to alert the desired stations when the door phone goes off-hook on its station port.
- 14. The information for this system is based on engineering judgment.

#### Contents

1	Introduction	1 - 1	
	<ul> <li>Using This Manual</li> <li>Features</li> <li>Tanna Yan Charled Kasur</li> </ul>	1-2 1-3	
	■ Terms You Should Know	1-5	
2	Installation Procedures	2-1	
	Important Safety Information	2-3	
	General Information	2-5	
		2-6	
	<ul> <li>Door Phone Controller Back Panel Connections</li> </ul>	2-6	
	Prior to Installation	2-8	
	AT&T Door Phone Controller Location	2-9	
	Installation	2-11	
	Connecting Door Speaker, Door Button, and Door Aj	ar	
	Switch to the AT&T Door Phone Controller	2-13	
	Connecting Power	2-17	
	Operation and Controls Information	2-20	
	Connecting the AT&T Door Phone Controller to		
	Your Telephone Equipment	2-22	

3	Installation for Home/Residential	3-1
	Overview	3-2
	DIP Switch Selections	3-2
	■ Installation	3-3
	Option Selection	3-5
	Operation – Basic Door Answer Function	3-7

4	Installation for Telephone Systems With Available Dedicated Trunk Port	4-1
	Overview	4-2
	DIP Switch Selections	4-2
	■ Installation	4-3
	Option Selection	4-6
	<ul> <li>Operation – Basic Door Answer Function</li> </ul>	4-8
5	Installation for Telephone Systems With Available Station Port	5-1
	■ Overview	5-2
	DIP Switch Selections	5-2
	■ Installation	5-3
	Option Selection	5-5
	Operation	5-8
6	Installation for Telephone Systems Without Available Dedicated Trunk or Station Port	6-1
		6-2
	<ul> <li>Overview</li> <li>DIP Switch Selections</li> </ul>	6-2 6-2
	<ul> <li>Overview</li> <li>DIP Switch Selections</li> <li>Installation</li> </ul>	6-2 6-2 6-3
	<ul> <li>Overview</li> <li>DIP Switch Selections</li> <li>Installation</li> <li>Option Selection</li> </ul>	6-2 6-2 6-3 6-5
	<ul> <li>Overview</li> <li>DIP Switch Selections</li> <li>Installation</li> <li>Option Selection</li> <li>Port Saver or Trunk Saver Mode Installation</li> </ul>	6-2 6-2 6-3 6-5 6-6
	<ul> <li>Overview</li> <li>DIP Switch Selections</li> <li>Installation</li> <li>Option Selection</li> <li>Port Saver or Trunk Saver Mode Installation</li> <li>Operation – Basic Door Answer Function</li> </ul>	6-2 6-2 6-3 6-5 6-6 6-9
7	<ul> <li>Overview</li> <li>DIP Switch Selections</li> <li>Installation</li> <li>Option Selection</li> <li>Port Saver or Trunk Saver Mode Installation</li> <li>Operation – Basic Door Answer Function</li> </ul> Troubleshooting and Maintenance	6-2 6-2 6-3 6-5 6-6 6-9 7-1
7	<ul> <li>Overview</li> <li>DIP Switch Selections</li> <li>Installation</li> <li>Option Selection</li> <li>Port Saver or Trunk Saver Mode Installation</li> <li>Operation – Basic Door Answer Function</li> </ul> Troubleshooting and Maintenance <ul> <li>Troubleshooting Procedures</li> </ul>	6-2 6-2 6-3 6-5 6-6 6-9 7-1 7-2

A	DIP Switch Settings	A-1
В	Option Selection Mode Definitions	B-1
С	Specifications	C-1
D	Using the AT&T Door Phone Controller With an Answering Machine	D-1
E	AT&T Auxiliary Alert Option	E-1
F	FCC Regulations and Warranty	F-1

### Figures

1

2

Introdu	Introduction			
1-1.	Front View of the AT&T Door Phone Controller and Control Panel	1-4		

Installa	ation Procedures	2-1
2-1.	Door Phone Controller Back Panel Connections	2-8
2-2.	Typical AT&T Door Phone Controller Installation	2-10
2-3.	Mounting AT&T Door Phone Controller to Wall	2-12
2-4.	Connections for AT&T Door Phone Speaker, Door Button and Door Ajar Devices	2-14
2-5.	Connections for Remote Door Open Switch (optional)	2-15
2-6.	Connections for Electric Door Strike Plate (optional)	2-16
2-7.	Connections for Auxiliary Alert Device (optional)	2-18
2-8.	Plug the AT&T Door Phone Controller Power Cord and Transformer to 120 VAC Outlet	2-19
2-9.	Configuration of Telephone Equipment Flow Chart	2-22

3 Installation-Home/Residential		tion-Home/Residential	3-1
	3-1. 3-2.	Home/Residential DIP Switch Settings Connecting AT&T Door Phone Controller to Standard Telephone Equipment	3-3 3-4

4	Installation-Dedicated Trunk Port	4-1
	4-1. DIP Switch Setting for PBX with Dedicated Trunk Port	4-3
	4-2a. Connecting Door Phone Controller to Standard Telephone Equipment	4-4
	4-2b. Using Modified Modular Cable for Ground Start Installations	4-5
5	Installation-Dedicated Station Port	5-1
	5-1. DIP Switch Configuration for Telephone System with Dedicated Station Access, Station Mode	5-3
	5-2. Connecting the AT&T Door Phone Controller to a Telephone System with Dedicated Analog Station Port	5-4
6	Installation-No Dedicated Trunk/Station Port	6-1
6	<ul> <li>Installation-No Dedicated Trunk/Station Port</li> <li>6-1. DIP Switch Setting for PBX With Shared Trunk Port</li> <li>6-2. Connecting The AT&amp;T Door Phone Controller to a Telephone System With Shared Trunk Port</li> </ul>	6-1 6-3 6-4
6 D	<ul> <li>Installation-No Dedicated Trunk/Station Port</li> <li>6-1. DIP Switch Setting for PBX With Shared Trunk Port</li> <li>6-2. Connecting The AT&amp;T Door Phone Controller to a Telephone System With Shared Trunk Port</li> <li>Using the Door Phone Controller With An Answering Machine</li> </ul>	6-1 6-3 6-4 D-1
6 D	<ul> <li>Installation-No Dedicated Trunk/Station Port</li> <li>6-1. DIP Switch Setting for PBX With Shared Trunk Port</li> <li>6-2. Connecting The AT&amp;T Door Phone Controller to a Telephone System With Shared Trunk Port</li> <li>Using the Door Phone Controller With An Answering Machine</li> <li>D-1. Installation Method Used For Answering Only Telephone Calls</li> </ul>	6-1 6-3 6-4 D-1 D-2
6 D	<ul> <li>Installation-No Dedicated Trunk/Station Port</li> <li>6-1. DIP Switch Setting for PBX With Shared Trunk Port</li> <li>6-2. Connecting The AT&amp;T Door Phone Controller to a Telephone System With Shared Trunk Port</li> <li>Using the Door Phone Controller With An Answering Machine</li> <li>D-1. Installation Method Used For Answering Only Telephone Calls</li> <li>D-2. Installation Method Used For Answering Both Door and Telephone Calls</li> </ul>	6-1 6-3 6-4 D-1 D-2 D-2
6 D	<ul> <li>Installation-No Dedicated Trunk/Station Port</li> <li>6-1. DIP Switch Setting for PBX With Shared Trunk Port</li> <li>6-2. Connecting The AT&amp;T Door Phone Controller to a Telephone System With Shared Trunk Port</li> <li>Using the Door Phone Controller With An Answering Machine</li> <li>D-1. Installation Method Used For Answering Only Telephone Calls</li> <li>D-2. Installation Method Used For Answering Both Door and Telephone Calls</li> <li>Appendix-Auxiliary Alert Device Connections</li> </ul>	6-1 6-3 6-4 D-1 D-2 D-2 E-1

## Tables

3	Installation-Home/Residential	3-1
	3-1. AT&T Door Phone Controller Option Selection Information	3-6
4	Installation-Dedicated Trunk Port	4-1
	4-1. AT&T Door Phone Controller Option Selection Information	4-8
5	Installation-Dedicated Station Port	5-1
	5-1. AT&T Door Phone Controller Option Selection Information	5-7
6	Installation-No Dedicated Trunk/Station Port	6-1
	6-1. AT&T Door Phone Controller Option Selection Information	6-8
7	Troubleshooting and Maintenance	7-1
	7-1. Troubleshooting Procedures	7-2

# Introduction

1

This manual will help you install, program and operate the AT&T Door Phone Controller. It contains important information on what features are available and how to use them. We urge you to read this manual prior to installing the AT&T Door Phone Controller; this will ensure that you are using the product to its fullest capability.

**Section 1** (this section) provides basic information on what the AT&T Door Phone Controller is and what are its features. Also included is a Glossary of Terms, a necessity for persons not familiar with telephone equipment operation and installation.

Section 2, Installation, provides important installation information. This section has step-by-step procedures for connecting the AT&T Door Phone Controller to such optional equipment as

- Remote door unlocking devices
- Door ajar switch
- Auxiliary alert device
- Remote open button

Section 2 also provides an easy to use flow chart, which directs the installer to the next appropriate section, depending on what type of telephone equipment (residential, PBX, etc.) will be used along with your AT&T Door Phone Controller.

**Sections 3 through 6** – after reading Section 2 and the flow chart at the end of that section, the installer is referred to one of these sections. Depending on which section is referenced, all the necessary programming, switch setting and operating information will also be included.

**Section 7** provides troubleshooting tips for when installation is complete and the AT&T Door Phone Controller is not operating correctly.

**Tear-out Reference Card** at the end of this manual provides all the necessary option selection information along with complete DIP switch settings and their definitions.

# The AT&T Door Phone Controller

The AT&T Door Phone Controller provides multi-functional control for communications to a dedicated door-speaker unit and a remote door-unlocking device. The AT&T Door Phone Controller (see Figure 1-1) can be used alone, or it can be used along with a PBX (Private Branch Exchange) or communications system to alert personnel within a residence or building that someone is requesting attention at the entrance. Operating the unit is simple: when the push button on the door speaker is pressed, the AT&T Door Phone Controller unit signals a telephone station(s) and can activate an auxiliary alerting device (such as a door bell, chime, or tone generator) within the home or building. Upon hearing the ringing telephone and/or alerting device, answer the phone and have a two-way phone conversation with the person at the door. The person inside the building can also remotely unlock the door, either by entering a numeric code (Door Code) on the telephone's touch-tone keypad, or by pressing a button.

### Features

- Control for remote door unlocking
- Voice communications with door speaker
- Door ajar detect
- Interface for door bell, chime, or tone generator
- Selectable option functions (from touch tone telephone)



Figure 1-1. Front View of the AT&T Door Phone Controller and Control Panel

**AuxiliaryAlert** —A door speaker's push button can activate a bell/chime within the building.

**Cadence** —Telephone Ringing cycle, i.e., 2 second ringing, 4 second no ringing.

**C.O. line** —Central Office telephone line carrier into building.

**EKTS (Electronic Key Telephone System)** —Small business telephone communications system.

**Ground Start** —One method by which a business telephone system (PBX) signals the telephone company that you have gone off-hook. Used in most business applications – contact your telephone company to determine if you have Ground or Loop Start.

**Loop Start** —One method of signaling the telephone company that your telephone has gone off-hook – used for most residential and communication system applications. Contact your telephone company to determine if you have Ground or Loop Start.

**PBX (Private Branch Exchange)** —Business telephone system.

**Ringdown**—In Station mode, the activation of the door speaker's push button will cause the AT&T Door Phone Controller to dial the number of a predetermined telephone station number (PBX or EKTS must be installed). When the telephone is answered, there is direct two-way communication with the door speaker.

Trunk Port — PBX connection for Central Office or trunk lines.

Station Port — PBX connection for station sets.

**Hook-Flash** —This causes telephone equipment to go "on hook" for a duration usually less than a second (not long enough to be considered as calling for the circuit to be released.)

# **Installation Procedures**

# 2

# **Important Safety Instructions**

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- 1. Read and understand all instructions.
- 2. Follow all warnings and instructions marked on the product.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 4. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- 5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- 6. Slots and openings in the cabinet and the back or bottom are provided for ventilation. To avoid overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on the bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
- 7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

- 8. AWARNING: RISK OF ELECTRICAL SHOCK EQUIPMENT MUST BE PROPERLY GROUNDED. Your AT&T equipment requires a properly grounded three-prong power receptacle for safe operation. Have the receptacle checked by a qualified electrician before connecting this equipment. Do not cut or remove the third (ground) prong from the power transformer. Do not use two-prong extension cords or adapters to defeat the safety features of this equipment. If you have a two-prong receptacle, it must be replaced with a three-prong receptacle, installed by a qualified electrician.
- 9. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
- 10. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
- 11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
- 12. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified serviceman when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.
- 13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - A. When the power supply cord or plug is damaged or frayed.
  - B. If liquid has been spilled into the product.

- C. If the product has been exposed to rain or water.
- D. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
- E. If the product has been dropped or the cabinet has been damaged.
- F. If the product exhibits a distinct change in performance.
- 14. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- 15. Do not use the telephone to report a gas leak in the vicinity of the leak.

#### SAVE THESE INSTRUCTIONS.

# **General Information**

Please adhere to the following precautions:

- 1. Never install telephone wiring during a lightning storm.
- 2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- 3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 4. Use caution when installing or modifying telephone lines.

Contact a licensed electrician for installation of optional devices such as an electric strike plate and auxiliary alert device which may require electrical wiring. For the electric strikeplate, a low voltage device (24 volts or less) is recommended. This section provides instructions for installing your AT&T Door Phone Controller. Provided are installation instructions for an optional electric door strike plate, door ajar contacts, and an auxiliary alert device. These optional components must be installed prior to the installation of your AT&T Door Phone Controller. (Refer to the respective installation manuals for specific mounting and wiring instructions.) The flow-chart provided in Figure 2-9, will help direct you to the next appropriate section for attaching the AT&T Door Phone Controller to the telephone equipment in your home or business (also see Compatibility Chart on page iii).

# Inside the AT&T Door Phone Controller shipping carton you will find:

- The AT&T Door Phone Controller unit
- Mounting template (along the edge of the Tear-out Reference Card)
- Power cord and attached transformer
- Two mounting screws
- Two 6-conductor modular-to-modular 6 foot long cables
- Terminal strip connector
- Instruction Manual (this manual)

# **Door Phone Controller Back Panel Connections**

The 14-contact terminal strip can be unplugged from the back panel. The AT&T Door Phone Controller back panel (see Figure 2-1) has two RJ11 modular connectors and one 14-contact "hard wire" terminal strip. These connections provide:

- Auxiliary Alert Contacts (2) output to optional door bell/chime device.
- Door Latch Contacts (3) output to an electric door strike.
- Remote Open Button Contacts (2) input from a remote (inside) door open button.

- Door Ajar Switch Contacts (2) input from door ajar device.
- Door Bell Button Contacts (2) input from door bell/chime button.
- Shield Contact (1) used for shielding audio speaker wires.
- Speaker Contacts (2) provides audio connection to door speaker(s).

Host system RJ11 (J1 Host) modular jack interface —This jack is provided for connection to your own telephone set, or business telephone system (PBX or EKTS) (the host system).

**Central Office RJ11 (J2) modular jack interface** —This jack is provided for connection to a C.O. telephone line (from telephone company's central office).

WARNING: RISK OF ELECTRICAL SHOCK — EQUIPMENT MUST BE PROPERLY GROUNDED. Your AT&T equipment requires a properly grounded three-prong power receptacle for safe operation. Have the receptacle checked by a qualified electrician before connecting this equipment. Do not cut or remove the third (ground) prong from the power transformer. Do not use two-prong extension cords or adapters to defeat the safety features of this equipment. If you have a two-prong receptacle, it must be replaced with a three-prong receptacle, installed by a qualified electrician.



Figure 2-1. Door Phone Controller Back Panel Connections

# **Prior To Installation**

#### NOTE: Consider the following items before installation:

- 1. Never install telephone wiring during a lightning storm.
- 2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 4. Use caution when installing or modifying telephone lines.

# **AT&T Door Phone Controller Location**

You need to determine exactly where you want the unit installed and how you want it configured. Another consideration is what components will be used with the AT&T Door Phone Controller. Here are some questions that must be answered prior to installation:

- Do you currently have a door speaker installed?
- Do you have a business telephone system (PBX or EKTS)?
- Do you have a remote door unlock mechanism (electric door strike) installed?
- Do you have an auxiliary alert system (door chime) currently installed?
- Do you have a door ajar switch installed?

The AT&T Door Phone Controller is designed to control the functions of the components mentioned above, and how you answer these questions will determine how the AT&T Door Phone Controller will be installed, optioned, and operated.

When selecting options for your AT&T Door Phone Controller, e.g., to change the door-unlock security code, the AT&T Door Phone Controller unit must be DIP switch selected to Option Selection mode. For this reason you may want to install the AT&T Door Phone Controller unit in a secure area which has access only by authorized personnel. If you are installing the unit in a business environment (currently have PBX/EKTS), you may wish to install the unit along with the telephone equipment. (See Figure 2-2 for a typical installation diagram.)



Figure 2-2. Typical AT&T Door Phone Controller Installation

# **Mounting Instructions**

The AT&T Door Phone Controller can be placed on a flat table or shelf, or mounted to a wall.

## Wall Mount Instructions

When moving AT&T Door Phone Controller or adding/ removing cables from back panel, unplug transformer from 120V outlet.

Also unplug the terminal strip and modular phone connectors on the back panel. The AT&T Door Phone Controller is shipped with a keyhole mounting template and mounting screws. Follow the steps below to mount the Door Phone Controller to a wall.

- 1. Place template (tear-out page at end of manual) over desired wall mounting location and mark screw positions.
- Use a Philips screwdriver to screw each of the two screws into the marked screw positions.
   IMPORTANT: Do not drive screws all the way into wall; adequate space (5/16") must be left to position the AT&T Door Phone Controller bottom panel keyholes over screw heads.
- Mount the AT&T Door Phone Controller over the protruding screw heads and seat unit firmly to the wall. See Figure 2-3.
  - WARNING: RISK OF ELECTRICAL SHOCK EQUIPMENT MUST BE PROPERLY GROUNDED. Your AT&T equipment requires a properly grounded three-prong power receptacle for safe operation. Have the receptacle checked by a qualified electrician before connecting this equipment. Do not cut or remove the third (ground) prong from the power transformer. Do not use two-prong extension cords or adapters to defeat the safety features of this equipment. If you have a two-prong receptacle, it must be replaced with a three-prong receptacle, installed by a qualified electrician.

4. When the AT&T Door Phone Controller is securely mounted to the wall, then all cables and wires can be connected to the terminal strip and then plugged into the back panel.





# **Connecting Door Speaker, Door Button, and Door Ajar Switch to the AT&T Door Phone Controller**

Polarity of wires is not important.

Total wire length should not exceed 1500 feet.

Door Ajar switch should be closed when door is closed. If a door ajar switch will not be used, you must leave a jumper installed across the two "Door Ajar Switch" terminals. Use the diagram in Figure 2-4 and follow the steps below:

- Run shielded twisted pair wires (22–24AWG) from the "Speaker" terminals on the rear panel of the AT&T Door Phone Controller (13 & 14) to the installed Door Speaker (1 & 2). Connect the shield to the "Shield" terminal on the controller (12).
- Run 2 wires (22–24AWG) from the "Door Bell Button" terminals (10 & 11) to the door bell push button on the installed door speaker/push button assembly (3 & 4).
- Run 2 wires (22-24AWG) from the optional "Door Ajar Switch" terminals (8 & 9) to the installed door ajar switch.

# Remote Door Open Switch (optional)

A remote door open switch (normally-open contact) provides additional means for opening an electric door opening device. To connect wires for a remote door open switch use the diagram in Figure 2-5 and follow the steps below.

- 1. Install the remote door open button in desired location using manufacturer's installation instructions.
- Run 2 wires (22–24AWG) from the installed (normallyopen contact) remote door open switch to the "Remote Door Open" terminals (6 & 7) on the AT&T Door Phone Controller back panel (polarity of wires is not important).



Figure 2-4. Connections for AT&T Door Phone Speaker, Door Button and Door Ajar Devices



Figure 2-5. Connections for Remote Door Open Switch (optional)

# Electric Door Strike Plate Device (optional)

If your Electric Door Strike Plate has more than a 1 Amp current draw, then an external relay arrangement is required. An electric door strike plate is used to automatically open a closed or locked door. A low-voltage device (24V or less) is recommended. The AT&T Door Phone Controller can provide an open or closed contact when requested to interface to and to operate your electric door strike plate device. Once an electric door strike plate has been installed, it can be controlled by the AT&T Door Phone Controller unit, either from entering the appropriate digits from a touch tone phone or from the Remote Open switch (push button).

Follow the steps below and refer to Figure 2-6 for wiring the door strike plate device to the AT&T Door Phone Controller.

Do not include strike plate wires within the same cable as others wires connecting to the AT&T Door Phone Controller.

- Have the electric door strike plate device installed as instructed by the manufacturers installation manual. Check electric installation codes and local ordinances for exact wiring requirements in your area.
- Normally Open (N.O.), Normally Closed (N.C.), and Common (C.) relay contacts are accessible at the Door Phone Controller terminal block. Wire these to the door strike plate device and its power source as instructed by your manufacturer's installation manual. If no instructions exist, wire the above relay contacts to the existing door open button (see #3 below).



Figure 2-6. Connections for Electric Door Strike Plate (optional)

3. Verify all connections when connecting the door strike contacts on the AT&T Door Phone Controller to existing door open buttons. Make sure of the following:

NOTE: One or the other will apply, not both.

- The NO and C contacts are connected in parallel to a normally-open button.
- The NC and C contacts are connected in series to a normally-closed button.

# Auxiliary Alert Device (optional)

If the Auxiliary Alert Device has more than a 1 Amp draw, then an external relay arrangement will be required.

See Appendix E for specific auxiliary alert device installation information.

In most configurations, the Door Phone Controller will cause a telephone to ring when the doorbell button is pushed. An auxiliary alert device (chime, bell, horn, tone generator, etc.) can also be used as an alert to notify the person inside the building that the doorbell button has been pushed (Auxiliary Alert Mode). A low-voltage device (24V or less) is recommended. Follow the steps below (refer to Figure 2-7) for wiring auxiliary alert device (door bell/chime) to the Door Phone Controller:

- 1. Install the auxiliary alert device (door bell/chime) as instructed by the manufacturer's installation manual.
- The Normally Open (N.O.) and Common (C.) relay contact, located on the Door Phone Controller back panel (see Figure 2-7), are accessible at the Door Phone Controller terminal block. Wire these to the auxiliary alert device and it's power source as instructed by the manufacturer's installation manual.

## **Connecting Power**

When the Door Phone Controller has been mounted to a wall or placed on a shelf and all cables and wires have been connected to the back panel, plug the transformer into a 120 VAC outlet. See Figure 2-8.



Figure 2-7. Connections for Auxiliary Alert Device (optional)



Figure 2-8. Plug the AT&T Door Phone Controller Power Cord and Transformer to 120 VAC Outlet

# **Operation and Controls Information**

# Door Ajar Function

**Default Condition** —After the door has been opened by the four digit code or the remote push button, the Door Phone Controller will wait for the Door Ajar Call-back time-out to elapse. At this point if the door is still open, the Door Phone Controller will call back the phone/chime for the duration of the ring/chime duration and then repeat after the Door Ajar Call-back time-out has elapsed again. If the phone is answered during that time, a Door Ajar Tone will be heard. The Door Ajar Tone will cease when any DTMF Digit is pressed, or the user speaks or hangs-up.

Alternate Condition —If the door is *ever* opened and the Door Ajar Call-back time-out has elapsed, the Door Phone Controller will call back the phone/chime for the duration of the ring/chime duration and then repeat after the Door Ajar Call-back time-out has elapsed again. If the phone is answered during that time, a Door Ajar Tone will be heard. The Door Ajar Tone will cease when any DTMF digit is pressed, or the user speaks or hangs-up.

## Speaker Volume Control

You can adjust the volume level of the door speaker by adjusting the Speaker Volume Control on the Door Phone Controller front panel (see Figure 1-1).

## Talk Back Volume Control

You can adjust the volume level from the door speaker to an inside telephone extension by adjusting the Talk Back Volume Control (see Figure 1-1).
# LED

When the AT&T Door Phone Controller is powered on and functioning normally, the LED (Figure 1-1) should continually blink 2.5 times a second. If there is a malfunction the LED will blink faster than 4 times a second (see Troubleshooting section) or go out completely. If the LED is not lit, check power to unit first before calling for repair.

# **Connecting the AT&T Door Phone Controller to Your Telephone Equipment**

Use the flow chart in Figure 2-9 to assist in configuring the AT&T Door Phone Controller to your residential or business-type telephone equipment. Answer each appropriate question in the flow chart and refer to the section specified within this manual. Then proceed with the necessary installation and option selection requirements. **NOTE: If you are installing the AT&T Door Phone Controller into a typical Home/Residential environment (no PBX) refer to Section 3 now.** 



Figure 2-9. Configuration of Telephone Equipment Flow Chart

# **Installation for Home/Residential** (Trunk Saver Mode - Loop Start)

# 3

You may also use the AT&T Door Phone Controller with a dedicated phone. This section provides installation and operation information for applications such as residences or small businesses which do **not** have a telephone system.

When your AT&T Door Phone Controller is installed with standard telephone equipment (no PBX), the unit may operate in Shared Line Mode which permits a single telephone set to be shared between the AT&T Door Phone Controller and an outside line (to a Central Office). Thus, the standard telephone equipment can be used for normal call operations as well as servicing the door.

#### **DIP Switch Selections**

To customize the AT&T Door Phone Controller to your specific installation and option requirements, you must properly set the 8 position DIP switch located on the AT&T Door Phone Controller front panel (see Figure 1-1).

**CAUTION:** Do not connect to the modular jacks on the AT&T Door Phone Controller until after the DIP switches have been properly set.

Complete information about the DIP switch settings can be found in Appendix A. When using the Door Phone Controller with a small business or residential telephone equipment (no PBX installed), the DIP switches must be set as shown in Figure 3-1 (all OFF).



Figure 3-1. Home/Residential DIP Switch Settings

### Installation

When moving the Door Phone Controller or adding or removing cables from the back panel, unplug the transformer from 120V outlet. Also unplug the terminal strip and modular phone connectors on the back panel. Connect the Door Phone Controller using the information in Section 2. Refer to Figure 3-2.



Figure 3-2. Connecting AT&T Door Phone Controller to Standard Telephone Equipment

Refer to Appendix B for a detailed explanation of each of these options.

The final step of the installation procedure is selecting options for your AT&T Door Phone Controller. The selection of these options must be done while in the Option Selection Mode. This mode lets you control such things as:

- Delay Before Door Ajar Call-Back
- Ring/Chime Cadence
- Ring/Chime Duration
- Door Unlock Code
- Door Unlock Duration
- Enable Door Code
- Door Ajar Mode
- Forced Disconnect Time-Out
- Reset Options to Factory Defaults

Follow the steps below to select options for the Door Phone Controller.

- 1. Select Option Selection Mode by setting position 8 of the Door Phone Controller DIP switch to the ON position (see Figure 1-1).
- Once the DIP switch has been set, you must make connection to the door speaker by "hook-flashing" the phone (within 5 seconds) and entering "##3" on the telephone keypad (option selection mode is active as soon as you hear a distinctive dial tone).
- 3. Use Table 3-1 to make each option selection.

Any or all options may be reselected in any order.

Options	Mode Option/ Verify	Press	Listen	Press	Listen For	Default
Delay Before Door Ajar Call-back	To Select Option To Verify	00 01	Single Beep	000 to 255 for 0 to 255 seconds of delay after strike plate release stops until AT&T Door Phone Controller calls back to indicate that door is ajar	Double Beep	30 sec.
Ring/Chime Cadence	To Select Option To Verify	10 11	Single Beep	24 (for 2 sec. on 4 sec. off cadence) <b>or</b> 15 (for 1 sec. on 5 sec. off cadence)	Double Beep	2 sec./ 4 sec.
Ring/Chime Duration	To Select Option To Verify	20 21	Single Beep	00 to 99 (0 to 99 second(s) ring/chime)	Double Beep	30 sec.
Door Unlock Code	To Select Option To Verify	30 31	Single Beep	4 digits (first digit must be 0,3,4,5,6,7 or 8 remaining digits can be set from 0 to 9)	Double Beep	6736 "OPEN"
Door Unlock Duration	To Select Option To Verify	40 41	Single Beep	00 to 99 (door lock active time in sec.)	Double Beep	4 sec.
Enable Door Code	To Select Option To Verify	50 51	Single Beep	1 Enable door code 0 Disable door code	Double Beep	1 (Enabled)
Door Ajar Mode	To Select Option To Verify	50 51	Single Beep	<ul> <li>2 For callback after strike plate release only</li> <li>3 For callback anytime door is opened</li> </ul>	Double Beep	2
Forced Disconnect Time-Out	To Select Option To Verify	60 61	Single Beep	010 to 255 (unit disconnects in 10 to 255 sec.)	Double Beep	120 sec.
Reset Options to Factory Defaults	To Select Option To Verify	70 71	Single Beep	## (to restore factory default conditions)	Double Beep	N/A

Table 3-1. AT&T Door Phone Controller Option Selection Information

NOTE: The Door Ajar Delay (Option Selection) will begin when the call to the door speaker is disconnected.

The Forced Disconnect Time-out option does not apply when setting options (unless 2 minutes elapse without a Touch-Tone selection)

- 4. To exit option selection mode, press "##3" on the telephone keypad (you will hear 2 beeps). Hang up the phone.
- 5. Set position 8 of the AT&T Door Phone Controller DIP switch back to the OFF position.

## **Operation – Basic Door Answer Function**

## Visitor Presses Door Speaker Button

When a visitor presses the door speaker push button, the AT&T Door Phone Controller will signal the telephone equipment inside your home or building to ring, and activate a door-bell/chime device (optional). Any additional presses on the door speaker push button will be ignored until the option selected ring/chime duration has expired (with the exception that a confirmation tone will still be sent to the speaker when the door button is pressed).

## Answering a Call from the Door Speaker

The person inside the building can simply answer the ringing phone and establish two-way communications with the door speaker. To open the door, the person inside the building either enters the Door Code on the telephone's keypad or presses the customer provided door-unlock push button. Either of these actions will activate the customer provided electric door strike plate device. As an alternative response when the telephone or door bell/chime is heard, the person inside the building can press the door-unlock push button, which will stop the ringing and will open the door. This allows the door to be unlatched without the use of a phone.

#### Calling the Door Speaker from Inside the Building

To initiate a call to the door, the person within the building simply takes the telephone off-hook and hook-flashes the telephone within the first 4 seconds. At this point, there will be direct two-way communication from within the building to the door speaker.

# Telephone Line In Use When Visitor Presses Door Speaker Button

Once the push button is pressed, you can "Hook Flash" to the door speaker and then back to the original call only once, unless the push button is pressed again.

If you forget to hook-flash back to the original call, the AT&T Door Phone Controller will call you back. If a visitor presses the door speaker button while an existing call is already taking place on the C.O. line, the AT&T Door Phone Controller will generate a "door alert" signal to indicate a visitor needs attention at the entrance. The person inside the building can hook-flash the phone and be in direct two-way communication to the door speaker. Then normal AT&T Door Phone Controller functions can take place. When door phone functions have been completed, i.e., door has been remotely opened, hook-flashing the phone again within the forced disconnect timeout (or pressing 9) will return the line back to the original call. This feature operates much like a call-waiting function.

# Telephone Line In Use With Door When Incoming Call Arrives

If there is a call in progress between the door speaker and a person inside the building and a C.O. call comes in, the person inside the building (not the door speaker) will hear a call waiting tone. The person inside the building can hook-flash the phone (or dial 9) and communicate with the incoming caller. When the call is complete, the person inside the building hangs up the phone or to speak with the person at the door speaker again, the person inside the building must hook-flash the phone (within 4 seconds after picking up the receiver).

# Installation for Telephone System With Available Dedicated Trunk Port

# 4

This section provides installation and operation information for installations with a telephone system that has an available Dedicated Trunk port.

### **DIP Switch Selections**

Complete information about the DIP switch settings can be found in Appendix A.

To customize the AT&T Door Phone Controller to your specific installation and option requirements, you must properly set the 8-position DIP switch located on the AT&T Door Phone Controller front Panel (see Figure 4-1).

**CAUTION:** Do not connect to the modular jacks on the AT&T Door Phone Controller until after the DIP switches have been properly set.

Use the Flow Chart in Figure 4-1 to properly set the DIP switch.

When using the AT&T Door Phone Controller with a telephone system which has an available dedicated trunk, set the DIP switch as shown in Figure 4-1. Prior to setting this DIP switch, you must know if the dedicated trunk is Loop Start or Ground Start; this information can be obtained from your local telephone company.



Figure 4-1. DIP Switch Setting for PBX with Dedicated Trunk Port

## Installation

When moving the AT&T Door Phone Controller or adding or removing cables from the back panel, unplug transformer from 120V outlet. Also unplug the terminal strip and modular cords.

Complete information regarding each DIP switch position can be found in Appendix A. To customize the AT&T Door Phone Controller use the information supplied in Section 2 and the diagram in Figure 4-2a. For ground start installations, also see Figure 4-2b. phone connectors on the back panel.

Install the AT&T Door Phone Controller using the information supplied in Section 2 and the diagram in Figure 4-2a. For ground start installations, also see Figure 4-2b.



Figure 4-2a. Connecting Door Phone Controller to Standard Telephone Equipment



Figure 4-2b. Ground Start Installations

Refer to Appendix B for a detailed explanation of each of these options.

The final step of the installation procedure is selecting options for your AT&T Door Phone Controller. The selection of these options must be done while in the Option Selection Mode. This mode lets you control such things as:

- Delay Before Door Ajar Call-Back
- Ring/Chime Cadence
- Ring/Chime Duration
- Door Unlock Code
- Door Unlock Duration
- Enable Door Code
- Door Ajar Mode
- Forced Disconnect Time-Out
- Reset Options to Factory Defaults

Follow the steps below to select options for your AT&T Door Phone Controller.

- ▲ CAUTION: Never connect an AT&T DOOR PHONE CONTROLLER with the DIP Switches optioned for TRUNK access to a STATION LINE! Doing so may cause damage to the STATION LINE and/or the AT&T DOOR PHONE CONTROLLER!
- 1. Select Option Selection Mode by setting position 8 of the AT&T Door Phone Controller DIP switch to the ON position (see Figure 1-1).
- Once the DIP switch has been set, you must make connection to the door speaker by accessing the trunk connected to the AT&T Door Phone Controller. At this point you must enter "##3" on the telephone keypad (option selection mode is active as soon as you hear a distinctive dial tone).
- 3. Use Table 4-1 to make each option selection.
- 4. To exit option selection mode, press "##3" on the telephone keypad, you will hear 2 beeps. Hang up the phone.
- 5. Set position 8 of the AT&T Door Phone Controller DIP switch (Figure 1-1) back to the OFF position.

Any or all options may be reselected in any order, The Forced Disconnect Time-out option does not apply when setting options (unless 2 minutes elapse without a Touch-Tone selection).

	Table 4-1.	AT&T	Door	Phone	Controller	Option	Selection	Information
--	------------	------	------	-------	------------	--------	-----------	-------------

Options	Mode Option/ Verify	Press	Listen For	Press	Listen For	Default
Delay Before Door Ajar Call-back	To Select Option To Verify	00 01	Single Beep	000 to 255 for 0 to 255 seconds of delay after strike plate release stops until AT&T Door Phone Controller calls back to indicate that door is ajar	Double Beep	30 sec.
Ring/Chime Cadence	To Select Option To Verify	10 11	Single Beep	24 (for 2 sec. on 4 sec. off cadence) <b>or</b> 15 (for 1 sec. on 5 sec. off cadence)	Double Beep	2 sec./ 4 sec.
Ring/Chime Duration	To Select Option To Verify	20 21	Single Beep	00 to 99 (0 to 99 second(s) ring/chime)	Double Beep	30 sec.
Door Unlock Code	To Select Option To Verify	30 31	Single Beep	4 digits (first digit must be 0,3,4,5,6,7 or 8 remaining digits can be set from 0 to 9)	Double Beep	6736 "OPEN"
Door Unlock Duration	To Select Option To Verify	40 41	Single Beep	00 to 99 (door lock active time in sec.)	Double Beep	4 sec.
Enable Door Code	To Select Option To Verify	50 51	Single Beep	<ol> <li>Enable door code</li> <li>Disable door code</li> </ol>	Double Beep	1 (Enabled)
Door Ajar Mode	To Select Option To Verify	50 51	Single Beep	<ol> <li>For callback after strike plate release only</li> <li>For callback anytime door is opened</li> </ol>	Double Beep	2
Forced Disconnect Time-Out	To Select Option To Verify	60 61	Single Beep	010 to 255 (unit disconnects in 10 to 255 sec.)	Double Beep	120 sec.
Reset Options to Factory Defaults	To Select Option To Verify	70 71	Single Beep	## (to restore factory default conditions)	Double Beep	N/A

NOTE: The Door Ajar Delay (Option Selection) will begin when the call to the door speaker is disconnected.

#### Visitor Presses Door Speaker Button

When a visitor presses the door speaker push button, the AT&T Door Phone Controller will signal the telephone equipment inside your building to ring and activate a door-bell/chime (optional). Any additional presses on the door speaker push button will be ignored (with the exception that a confirmation tone will still be sent to the speaker when the door button is pressed).

#### Answering a Call From the Door Speaker

When a person inside the building hears the telephone ring and/or the door bell/chime sound, he can simply respond by answering the ringing phone. At this point, the AT&T Door Phone Controller will establish two-way communication with the door speaker. To open the door, the person inside the building either enters the Door Code on the telephone's keypad or presses the door-unlock push button. Either of these actions will activate the customer provided electric door strike plate device.

As an alternative response to hearing the telephone or door bell/chime, the person inside the building can press the door-unlock push button which will stop the ringing and will open the door. This allows the door to be unlatched without the use of a phone.

#### Calling the Door Speaker

To initiate a call to the Door Speaker, the person inside the building simply takes the telephone off-hook and accesses the trunk connected to the AT&T Door Phone Controller.

# **Installation for PBX Equipment With Available Station Port**

5

This section provides installation and operation information for installations which use on-premise telephone system that has an available Dedicated Analog Station Port.

## **DIP Switch Selections**

Complete information about the DIP switch settings can be found in Appendix A.

To customize the AT&T Door Phone Controller to your specific installation and option requirements, you must properly set the 8-position DIP switch located on the AT&T Door Phone Controller front panel (see Figure 5-1).

CAUTION: Do NOT connect to the modular jacks on the AT&T Door Phone Controller until after the DIP switches have been properly set.

Use the flow chart in Figure 5-1 When to properly set the DIP switch. system

When using the AT&T Door Phone Controller with a telephone system which has an available dedicated station port, set the DIP switch as shown in Figure 5-1. Prior to setting this DIP switch, you must know if the telephone system is configured for auxiliary alert mode or ringdown mode (see page 1-5 for explanation of ringdown and auxiliary modes).



Figure 5-1. DIP Switch Configuration for Telephone System with Dedicated Station Access, Station Mode

### Installation

When moving the AT&T Door Phone Controller or adding or removing cables from the back panel, unplug transformer from 120V outlet. Also unplug the terminal strip and modular phone connectors on the back panel. To customize the AT&T Door Phone Controller for this type of installation, you must properly configure the 8-position DIP switch located on the Door Phone Controller front panel (see Figure 1-1). Use the Flow Chart in Figure 5-1 to properly set the DIP switch.



Install the AT&T Door Phone Controller using the information in Section 2. Refer to Figure 5-2.

Figure 5-2. Connecting the AT&T Door Phone Controller to a Telephone System with Dedicated Analog Station Port

Refer to Appendix B for a detailed explanation of each of these options.

The final step of the installation procedure is selecting options for your AT&T Door Phone Controller. The selection of these options must be done while in the Option Selection Mode. This mode lets you control such things as:

- Delay before Door Ajar Call-Back
- Ring/Chime Cadence
- Ring/Chime Duration
- Door Unlock Code
- Door Unlock Duration
- Enable Door Code
- Door Ajar Mode
- Forced Disconnect Time-Out
- Reset Options to Factory Defaults
- Phone Number Storage Memory 1
- Phone Number Storage Memory 2

Follow the steps below to select options for the AT&T Door Phone Controller.

- CAUTION: Never connect an AT&T DOOR PHONE CONTROLLER with the DIP Switches optioned for TRUNK access to a STATION LINE! Doing so may cause damage to the STATION LINE and/or the AT&T DOOR PHONE CONTROLLER!
- 1. Select Option Selection Mode by setting position 8 of the AT&T Door Phone Controller DIP switch (see Figure 1-1) to the ON position.
- Once the DIP switch has been set, you must make connection to the door speaker by calling the extension number assigned to the Door Phone Station Port. At this point you must enter "##3" on the telephone keypad (option selection mode is active as soon as you hear a dial tone).
- 3. Use Table 5-1 to make each option selection.
- 4. To exit option selection mode, press "##3" on the telephone keypad. You will hear 2 beeps. Hang up the phone.
- 5. Set position 8 of the AT&T Door Phone Controller DIP switch back to the OFF position.

Any or all options may be reselected in any order. The Forced Disconnect Time-out option does not apply when setting options (unless 2 minutes elapse without a Touch-Tone selection).

Options	Mode Option/ Verify	Press	Listen For	Press	Listen For	Default
Delay Before Door	To Select Option	00	Single	000 to 255 for 0 to 255 seconds	Double	30 sec.
Ajar Call-back	To Verify	01	Беер	release stops until AT&T Door Phone Controller calls back to indicate that door is ajar	веер	
<b>Ring/Chime</b>	To Select Option	10	Single	24 (for 2 sec. on 4 sec. off cadence) <b>or</b> 15 (for 1 sec. on 5 sec. off cadence)	Double Beep	2 sec./ 4 sec.
Cadence	To Verify	11	веер			
<b>Ring/Chime</b>	To Select Option	20	Single	00 to 99 (0 to 99 second(s)	Double	30 sec.
Duration	To Verify	21	Беер	nng/chime)	веер	
Door Unlock Code	To Select Option	30	Single	4 digits (first digit must be	Double Beep	6736 "OPEN"
	To Verify	31	реер	remaining digits can be set from 0 to 9)		
Door Unlock Duration	To Select Option	40	Single	00 to 99 (door lock active time in sec.)	Double	4 sec.
	To Verify	41	Всер		веер	
Enable Door Code	To Select Option	50	Single Been	1 Enable door code 0 Disable door code	Double Been	1 (Enabled)
	To Verify	51	Всер		Беер	(Enabled)
Door Ajar Mode	To Select Option	50	Single Beep	2 For callback after strike	Double Beep	2
	To Verify	51	Воор	3 For callback anytime door is opened		
Forced Disconnect	To Select Option	60	) Single 1	10 to 255 (unit disconnects in	Double Been	120 sec.
Time-Out	To Verify	61	Всер	10 10 200 300.7	Всср	
Reset Options to Factory Defaults	To Select Option	70	Single Been	## (to restore factory default conditions)	Double Been	N/A
	To Verify	71	Всер		Всср	
Phone Number Storage Memory 1	To Select Option	80	Single Been	0 to 20 numerical digits and $*$ ( $* = 2$ second pause) #	Double Been	#
	To Verify	81	рсер	terminates entry	Бсер	
Phone Number	To Select Option	90	Single	0 to 20 numerical digits and $(* - 2 \text{ second pause}) #$	Double	#
Storage Memory 2	To Verify	91	реер	terminates entry	реер	

Table 5-1. AT&T Door Phone Controller Option Selection Information

## Auxiliary Alert Mode – Basic Door Answer Function

Visitor Presses Door Speaker Button

Answering a Call Sent From the Door Phone

The telephone system must pass Touch Tones to the station port connected to the AT&T Door Phone Controller in order for the Door Code to be recognized.

Complete installation instructions for adding an Auxiliary Alert option can be found in Appendix E.

Calling the Door Speaker When a visitor presses the door speaker push button, the Door Phone Controller will activate an auxiliary alert (door-bell/chime). Any additional presses on the door speaker push button will be ignored (with the exception that a confirmation tone will still be sent to the speaker when the door button is pressed).

When a person inside the building hears the door bell/chime sound, he can simply respond by dialing the Door Phone Controller station number. At this point, the AT&T Door Phone Controller will establish two-way communications with the door speaker.

To open the door, the person inside the building either enters the Door Code on the telephone's keypad or presses the customer provided door-unlock push button. Either of these actions will activate the customer provided electric door release.

As an alternative response to hearing the door bell/chime, the person inside the building can press the door-unlock push button which will stop the auxiliary contacts and will open the door. This allows the door to be unlatched without the use of a phone.

To initiate a call to the Door Speaker, the person inside the building simply takes the telephone off-hook and dials the station phone number of the door speaker.

#### Ringdown Mode – Basic Door Answer Function

Visitor Presses Door Speaker Button When a visitor presses the door speaker push button, the AT&T Door Phone Controller will activate a door-bell/chime (optional), go off-hook, and dial the pre-selected stored phone

	number, 1 or 2 (these can be selected by pressing ##1 or ##2 once connection to the speaker has been made). Any additional presses on the door speaker push button will be ignored while the Door Phone Controller is off-hook.
Answering a Call Sent From the Door Phone	When a person answers the ringing telephone, the Door Phone Controller will establish two-way communications with the door speaker.
	To open the door, the person inside the building either enters the Door Code on the telephone's keypad or presses the customer provided door-unlock push button.
Opening door will terminate station mode access.	Either of these actions will close the metallic contacts which activate the customer provided electric door release.
Calling the Door Speaker	To initiate a call to the Door Speaker, the person inside the building simply takes the telephone off-hook and dials the station phone number of the door speaker.

# **Installation for Telephone System** Without Available Dedicated Trunk or Station Port

6

Ground start trunks will **NOT** operate properly with this shared trunk installation.

This section provides installation and operation information for installations which use a telephone system that does not have an available Dedicated Trunk or Station Port. By configuring the telephone system to the instructions in this section, your telephone system equipment will operate in Trunk/Port share mode.

#### **DIP Switch Selections**

Complete information about the DIP switch settings can be found in Appendix A.

To customize the AT&T Door Phone Controller to your specific installation and option requirements, you must properly set the 8-position DIP switch located on the AT&T Door Phone Controller front panel (see Figure 1-1). Use the flow chart in Figure 6-1 to help configure the DIP switch for either Trunk Saver or Port Saver Mode.

A trunk shared with the AT&T Door Phone should never be configured in a telephone system with other trunks in a common pool or group.



Figure 6-1. DIP Switch Setting for PBX With Shared Trunk Port

# Installation

When moving the AT& T Door Phone Controller or adding or removing cables from the back panel, unplug transformer from 120V outlet, Also unplug the terminal strip and modular phone connectors on the back panel.

Complete information regarding each of the DIP switch positions can be found in Appendix A. Install the AT&T Door Phone Controller using the information in Section 2. Refer to Figure 6-2.

To customize the AT&T Door Phone Controller for this type of installation, you must properly set the 8-position DIP switch located on the AT&T Door Phone Controller front panel (see Figure 1-1). Use the Flow Chart in Figure 6-1 to properly set the DIP switch.

CAUTION: Do NOT connect to the modular jacks on the AT&T Door Phone Controller until after the DIP switches have been properly set.



Figure 6-2. Connecting the AT&T Door Phone Controller to a Telephone System With Shared Trunk Port

Refer to Appendix B for a detailed explanation of each of these options.

The final step of the installation procedure is selecting options for your AT&T Door Phone Controller. The selection of these options must be done while in the Option Selection Mode. This mode lets you control such things as:

- Delay Before Door Ajar Call-Back
- Ring/Chime Cadence
- Ring/Chime Duration
- Door Unlock Code
- Door Unlock Duration
- Enable Door Code
- Door Ajar Mode
- Forced Disconnect Time-Out
- Reset Options to Factory Defaults

## **Port Saver or Trunk Saver Mode Installation**

Refer to the following instructions for Port Saver Mode or Trunk Saver Mode installation.

#### Port Saver Mode

Follow the steps below to set the AT&T Door Phone Controller for **Port Saver Mode.** 

- CAUTION: Never connect an AT&T DOOR PHONE CONTROLLER with the DIP Switches optioned for TRUNK access to a STATION LINE! Doing so may cause damage to the STATION LINE and/or the AT&T DOOR PHONE CONTROLLER!
- 1. Select Option Selection Mode by setting position 8 of the AT&T Door Phone Controller DIP switch (see Figure 1-1) to the ON position.
- Access the trunk (allocated for the AT&T Door Phone Controller), and make connection to the door speaker by dialing "1" or "2" within 4 seconds. At this point you must enter "##3" on the telephone keypad (Option Selection Mode is active as soon as you hear a distinctive dial tone – if you don't hear a distinctive dial tone, check to see if switch 8 is DOWN).
- 3. Use Table 6-1 to make each option selection.
- 4. To exit Option Selection Mode, press "##3" on the telephone keypad. You will hear 2 beeps. Hang up phone.
- 5. Set position 8 of the AT&T Door Phone Controller DIP switch back to the OFF position.

Any or all options may be reselected in any order. The Forced Disconnect Time-out option does not apply when setting options (unless 2 minutes elapse without a Touch-Tone selection).

#### Trunk Saver Mode

Follow the steps below to set the AT&T Door Phone Controller for **Trunk Saver Mode**.

- CAUTION: Never connect an AT&T DOOR PHONE CONTROLLER with the DIP Switches optioned for TRUNK access to a STATION LINE! Doing so may cause damage to the STATION LINE and/or the AT&T DOOR PHONE CONTROLLER!
- 1. Select Option Selection Mode by setting position 8 of the AT&T Door Phone Controller DIP switch (see Figure 1-1) to the ON position.
- Access the Trunk (allocated for AT&T Door Phone Controller) and make connection to the door speaker by "Hook-Flashing" the phone. At this point you must enter "##3" on the telephone keypad (Option Selection Mode is active as soon as you hear a distinctive dial tone if you don't hear a distinctive dial tone, check to see if switch 8 is DOWN).
- 3. Use Table 6-1 to make each option selection.
- To exit Option Selection Mode, press "##3" on the telephone keypad, you will hear 2 beeps. Hang up phone.
- 5. Set position 8 of the AT&T Door Phone Controller DIP switch back to the OFF position.

Any or all options may be reselected in any order.

The Forced Disconnect Time-out option does not apply when setting options (unless 2 minutes elapse without a Touch-Tone selection).
Table 6-1. AT&T Door Phone Controller Option Selection Information

Options	Mode Option/ Verify	Press	Listen For	Press	Listen For	Default
Delay Before Door Ajar Call-back	To Select Option To Verify	00 01	Single Beep	000 to 255 for 0 to 255 seconds of delay after strike plate release stops until AT&T Door Phone Controller calls back to indicate door is ajar	Double Beep	30 sec.
Ring/Chime Cadence	To Select Option To Verify	10 11	Single Beep	24 (for 2 sec. on 4 sec. off cadence) <b>or</b> 15 (for 1 sec. on 5 sec. off cadence)	Double Beep	2 sec./ 4 sec.
Ring/Chime Duration	To Select Option To Verify	20 21	Single Beep	00 to 99 (0 to 99 second(s) ring/chime)	Double Beep	30 sec.
Door Unlock Code	To Select Option To Verify	30 31	Single Beep	4 digits (first digit must be 0,3,4,5,6,7 or 8; remaining digits can be set from 0 to 9)	Double Beep	6736 "OPEN"
Door Unlock Duration	To Select Option To Verify	40 41	Single Beep	00 to 99 (door lock active time in sec.)	Double Beep	4 sec.
Enable Door Code	To Select Option To Verify	50 51	Single Beep	1 Enable door code 0 Disable door code	Double Beep	(Enabled)
Door Ajar Mode	To Select Option To Verify	50 51	Single Beep	<ol> <li>For callback after strike plate release only</li> <li>For callback anytime door is opened</li> </ol>	Double Beep	2
Forced Disconnect Time-Out	To Select Option To Verify	60 61	Single Beep	010 to 255 (unit disconnects in 10 to 255 sec.)	Double Beep	120 sec.
Reset Options to Factory Defaults	To Select Option To Verify	70 71	Single Beep	## (to restore factory default conditions)	Double Beep	N/A

NOTE: The Door Ajar Delay (Option Selection) will begin when the call to the door speaker is disconnected.

### Visitor Presses Door Speaker Button

When a visitor presses the door speaker push button, the AT&T Door Phone Controller will signal the telephone equipment inside your building to ring, and activate an auxiliary alert (door-bell/chime) (optional). Any additional presses on the door speaker push button will be ignored (with the exception that a confirmation tone will still be sent to the speaker when the door button is pressed).

### Answering a Call From the Door Speaker

When a person inside the building hears the telephone ring and/or the door bell/chime sound, he can respond by answering the ringing phone. At this point, the AT&T Door Phone Controller will establish two-way communication with the door speaker. To open the door, the person inside the building either enters the Door Code on the telephone's keypad or presses the customer provided door-unlock push button. Either of these actions will activate the customer provided electric door strike plate device.

As an alternative response to hearing the telephone or door bell/chime, the person inside the building can press the doorunlock push button which will stop the ringing and will open the door. This allows the door to be unlatched without the use of a phone.

### Calling the Door Speaker From Inside the Building

Your PBX must be capable of relaying the hook-flash from the station set to the trunk port.

To initiate a call to the door in the Trunk Saver mode, the person within the building simply takes the telephone off-hook, accesses the trunk connected to the AT&T Door Phone Controller, and hook-flashes the telephone within the first 5 seconds. At this point, there will be direct two-way communication from within the building to the door speaker.

To initiate a call to the door in the Port Saver mode, the person within the building simply takes the telephone off-hook, accesses the trunk connected to the AT&T Door Phone Controller, and dials "1" within the first 4 seconds. At this point, there will be direct two-way communication from within the building to the door speaker. (Alternatively, the person may dial a "9" within the first 4 seconds after accessing the trunk in order to be immediately connected to the C.O. line.)

### Telephone Line In Use When a Visitor Presses Door Speaker Button

Once the doorbell push button is pressed, you can "Hook-Flash" to the door speaker and then back to the original call only once, unless the push button is pressed again.

If you forget to hook-flash back to the original call, the AT&T Door Phone Controller will call you back. If a visitor presses the door speaker button while an existing call is already taking place on the line, the AT&T Door Phone Controller will generate a "door alert" signal to indicate a visitor needs attention at the entrance. The person using the line can hook-flash the phone and be in direct two-way communication to the door speaker. The other party will be placed on hold. At this point, normal AT&T Door Phone Controller functions can take place. When the door phone functions have been completed, i.e., door has been remotely opened, hook-flashing phone again (or pressing 9) will return line to original call. This feature operates much like a call-waiting function.

### Telephone Line In Use With Door When a Call Arrives

If there is a call in progress between the door speaker and a station user and a call (C.O.) comes in, the person inside the building (not the door speaker) will hear a call waiting tone. The station user can hook-flash the phone (or dial 9) and communicate with the incoming caller. When the call is complete, the station user hangs up the phone. To speak with the door phone again, the station user must either hook-flash the phone (within 4 seconds of picking up the receiver) if installed for Trunk Saver Mode or dial "1" if installed for Port Saver Mode.

### Placing a Call Through the C.O. From Inside Building

To initiate a call through the C.O. in the Trunk Saver Mode, the person within the building simply takes the telephone off-hook, accesses the trunk connected to the AT&T Door Phone controller, and then dials the desired phone number. This is normal procedure for placing an outside call.

To initiate a call through the C.O. in the Port Saver Mode, the person within the building simply takes the telephone off-hook, then accesses the trunk connected to the AT&T Door Phone Controller. At this point the caller will hear a dial tone from the Door Phone Controller. Dialing a "9", or waiting 4 seconds, will switch the caller to the C.O. and the regular phone number is dialed.

# **Troubleshooting and Maintenance**

7

Table 7-1. Troubleshooting Procedure	es
--------------------------------------	----

Trouble	Possible Cause	Possible Solution	
LED "off" constantly	Check power connection.	If power connection is good, then return for repair.	
LED "on" constantly	Brown-out condition or software frozen.	Unplug and plug back in.	
LED blinking more than four times a second	Internal software error; may still work.	Unplug and plug back in; if problem continues return for repair.	
Talkback volume, but no speaker volume	Volume control turned down or DIP switches incorrectly set for mode of operation.	Verify setting of controls and DIP switches.	
Speaker volume, but no talkback volume	Volume control turned down.	Verify setting.	
No page or talkback volume	Shorted or open speaker lead connection.	Remove short or open.	
Unit disconnects after a certain time	Check forced disconnect time-out selection.	Change time-out (option selection).	
Dial tone heard from the speaker	DIP switches incorrect for mode of operation. Telephone system returns dial tone after Door Phone goes on-hook.	Verify Mode of operation. Program telephone system for no dial tone on this extension.	
Cannot hear your own voice	DIP switch incorrect.	Correct.	
in telephone ear piece	Plugged wires into wrong jack.	Correct.	
Station mode seizes line then disconnects before AT&T Door Phone Controller is	Forced disconnect timeout set to low.	Enter Option Selection Mode (##3), and enter new Forced Disconnect Timeout Duration.	
accesseu	Station line plugged into J2.	Correct, move to J1.	
Cannot access AT&T Door Phone Controller in trunk saver mode	J1 and J2 swapped.	Check connections and correct if needed.	
Getting door-ajar callback	Bad door ajar switch.	Fix or adjust.	
when upor is actually closed	Open door ajar switch wiring.	Fix.	

Table 7-1.	Troubleshooting	Procedures	(Continued)
------------	-----------------	------------	-------------

Trouble	Possible Cause	Possible Solution		
Getting door-ajar callback when door ajar switch is not used	Missing jumper on terminal block.	Jumper pins 8 & 9 of terminal block.		
Receive C.O. call waiting tone when accessing the Door Phone Controller but	Door Phone Controller optioned for dedicated mode instead of Trunk Saver or Port Saver Mode.	Verify DIP switch positions.		
to connect to call	PBX does not relay the hook- flash.	Use in dedicated mode.		
Cannot open door remotely using Touch Tone door unlatch function	Door Unlock option disabled <b>or</b> Wrong Door Code.	If error tone, verify Door Open Code and Door Unlock enable option.		
	Check all wiring from AT&T Door Phone Controller to electric strike plate device (see manufacturer's instructions).	Disconnect wires from the terminal block "Door Unlatch Contacts." Use volt/ohm meter to check continuity between NO and C terminals while activating Touch-Tone door unlatch function. If continuity test fails, return AT&T Door Phone Controller for repair.		
Cannot open door remotely using remote door open button	Check all wiring from AT&T Door Phone Controller to electric strike plate device, also check operation of electric strike plate device (see manufacturer's instructions).	Disconnect wires from the terminal block "Remote Open Button" and "Door Unlatch Contacts." Use volt/ohm meter to check continuity between both wires from the remote open button while activating the button. If continuity test of button is good, button is OK. Now reconnect button wires to "Remote Button Contacts," and check continuity of "Door Unlatch Contacts" (between NO and C) while activating remote door open button. If continuity test fails, return AT&T Door Phone Controller for repair.		

Trouble	Possible Cause	Possible Solution		
Cannot open door remotely using either Remote Door Open Button or the Door Code	Improper wiring to existing door strike device. May be caused by improper connection and use of NO (Normally-Open), NC (Normally Closed), and C (Common) door latch relay contacts, especially when interfacing these contacts to existing door configurations.	<ul> <li>Verify all connections when connecting the door strike contacts on the AT&amp;T Door Phone Controller to existing door open buttons. Make sure of the following:</li> <li>1. The NO and C contacts are connected in parallel to a normally-open button.</li> <li>2. The NC and C contacts are connected in series to a normally-open button.</li> </ul>		
Selected options are not operating as expected	Incorrect or inappropriate values were entered.	Use Verify mode to confirm selected options without changing the values. Carefully consider the "consequences" of options chosen.		

### Table 7-1. Troubleshooting Procedures (Continued)

### Maintenance

Periodic maintenance is not required.

Units requiring repair are returned to AT&T for service.

### Setting the DIP Switch Positions

NOTE: All switches are OFF when shipped from the factory. The AT&T Door Phone Controller's basic operating modes are selected on the 8-position DIP switch at the front of the unit (see Figure 1-1). Positions 1 through 5 are used to set up the way the AT&T Door Phone Controller will interface with your telephone equipment. Position 8 is used to access Option Selection Mode. Positions 6 & 7 are not used. The definition of each switch position is given below:

#### Switch 1

Selects between Trunk Access and Station Access. Trunk Access = OFF; Station Access = ON.

#### Switch 2

Selects between Dedicated Trunk or Shared Trunk. This switch only has meaning when Trunk Access is selected *with* Switch 1. Shared Trunk = OFF; Dedicated Trunk = ON.

#### Switch 3

Selects between Trunk Saver or Port Saver. This switch only has meaning when Trunk Access is selected *with* Switch 1 and Shared Trunk is selected *with* Switch 2. Trunk Saver= OFF; Port Saver = ON.

#### Switch 4

Selects between Loop Start and Ground Start. This switch only has meaning when Trunk Access is selected *with* Switch 1. Loop Start = OFF; Ground Start = ON.

#### Switch 5

Selects between Auxiliary Alert or Ringdown. This switch only has meaning when Station Access is selected *with* Switch 1. Auxiliary Alert = OFF; Ringdown = ON.

#### Switch 6

Not used.

#### Switch 7

Not used.

### Switch 8

Selects between Option Selection Mode and Normal Operation. This switch acts as a Option Selection security switch. If this switch is ON, any user can activate Option Selection Mode by keying in "##3" on a touch-tone telephone set which connects directly to the AT&T Door Phone Controller. When this switch is OFF, Option Selection Mode cannot be activated. Normal Mode = OFF; Option Selection Mode = ON.

## **Appendix B—Option Selection Mode Definitions**

The information below provides detailed information regarding each of the settable options for the AT&T Door Phone Controller.

- **Ring/Chime Cadence** Provides an alternate ring (on/off) cycle from how it would ring for a normal call. For instance, you can configure the telephone to ring for 2 seconds and then be silent for 4 seconds, or ring for 1 second and then be silent for 5 seconds.
- **Ring/Chime Duration** This option provides a maximum duration of telephone ringing cycles (in seconds) before the AT&T Door Phone Controller will disconnect.
- Door Unlock Code This option determines what your door unlock combination will be. The default is set for 6736, but for security reasons it is recommended you change this to your own four-number combination.
- **Door Unlock Duration** This option determines the amount of time the door unlock function will be activated. The default is 4 seconds.
- Enable Door CodeThis option can be set so the door access code is disabled.Once it is disabled, entering the door unlock code will not<br/>provide a door unlock function.
- **Door Ajar Mode** This option provides the choice of either having the Door Ajar call back any time the door is opened, or only after it has been opened via the strike plate release. Note: When the Door Ajar switch senses that the door has been opened and closed again, the door open relay will cease being energized.
- Forced DisconnectThis option sets the maximum time in which two-way<br/>communications can take place between the door speaker and<br/>the telephone. Setting this option to less than 30 seconds is not<br/>advised.

<b>Reset Option</b> Selections to Factory Defaults	This option is useful when current option selections are unknown. Note that this function will reset the Door Unlock Code to the default value, but it will not reset "Phone Number Storage Memory 1" or "Phone Number Storage Memory 2" (see below). Defaults to dialing phone number #1.
Phone Number Storage Memory 1	This option is used in what is called "Ringdown Mode" to auto-dial a particular extension or outside-line phone number. The AT&T Door Phone Controller has two memory locations for holding user stored telephone numbers. Phone numbers can be for telephones within the same building or off-premises. These memory locations are used exclusively in Ringdown Mode. Only one memory location is active at a time. To select the active location for the phone number, a telephone connection to the AT&T Door Phone Controller must be made (by calling the extension number of the Door Phone). Once connected dial in "##1", this selects Memory Location 1; if you were to dial in "##2", you would select Memory Location 2.
Phone Number Storage Memory 2	See above explanation.
Delay Before Door Ajar Call Back	This option determines the length of time allowed for the door to shut after it has been opened by the strike plate release. If the door is still ajar at the end of this period, the controller will call back and an alarm tone will be heard in the receiver when the phone is answered.

## Electrical

Standards	The Door Answer Controller meets:
	U.L. listing requirements
	■ F.C.C. part 15, class B requirements
	■ F.C.C. part 68 requirements
Electrostatic Discharge	Your AT&T Door Phone Controller complies with the ESD requirements in BELL Pub 48002.
	All user accessible connectors and controls have electrostatic discharge protection.
Power Supply	The AT&T Door Phone Controller is powered by an UL listed wall mount transformer with a strain relieved cord.
	It functions over an input power range of 96 VAC to 129 VAC.
	Your AT&T Door Phone Controller has a green LED power indicator.
	■ A flashing state of 2.5 per second indicates normal power to the unit and normal microprocessor operation.
	A constant ON state indicates a brown-out condition or microprocessor failure.
	• A constant OFF state indicates there is no power to the unit.
Page and Talk-Back Amplifier	Paging output power is 2 watts (continuous) @ 3.35 Vrms (sine wave). Talk-back input sensitivity: with 600 microVrms at the speaker leads, tip and ring output level will be -17 dBm.
Auxiliary Alert	Relay Contact Closures rated at 1 amp.
Door Latch Contacts	Relay Contact Closures rated at 2 amps.

Ring Generator	Your AT&T Door Phone Controller provides a ring generator signal which can ring devices that respond to either 20 Hz or 60 Hz frequencies. The ringer will automatically adapt to a 50 Hz line by ringing at 25 Hz.			
	A Ringer Equivalence (REN) of 2 is supported by the AT&T Door Phone Controller.			
C.O. Line Jack	Input has a REN of 0.5, Type B.			

### Mechanical

	The AT&T Door Phone Controller's control unit PCB is mounted in a molded plastic enclosure with a metal back panel. The front panel is protected by a flip down cover. You have access to controls and connections on the front panel and back panel.				
Front Panel	The front panel controls and indicators consist of:				
	■ one page volume control				
	one talkback volume control				
	one 8 position DIP switch				
	■ one power indicator (green LED)				
Back Panel	The back panel connections consist of:				
	one strain relieved cord approximately 6 feet in length attached to a wall mount transformer				
	one RJ11 jack for the telephone/PBX interface				
	one RJ11 jack for Central Office interface				
	one connector mounted terminal strip.				
Dimensions and Weight	Length: 10.5", Width: 9.5", Height: 2.5", Weight: 5.5 Lbs.				

## **Appendix D—Using the Door Phone Controller With An Answering Machine**

### Installation Information

When configuring the AT&T Door Phone Controller to answer both the door and telephone calls, be sure to change your outgoing message accordingly. This Appendix provides two methods for configuring an answering machine to the AT&T Door Phone Controller. The first method diagrams how to connect the AT&T Door Phone Controller with an answering machine so that only regular telephone calls are answered by the answering machine (see Figure A-1). The second method diagramed will allow the answering machine to answer both regular telephone calls and calls from the Door Speaker (see Figure A-2).

▲ CAUTION: When using your answering machine to answer both door and telephone calls, make sure to set your answering machine to allow for a limited length incoming message. Do not use an answering machine that cannot limit the incoming message length.



Figure D-1. Installation Method Used For Answering Only Telephone Calls



Figure D-2 Installation Method Used For Answering Both Door and Telephone Calls

### Installation Instructions

	The following instructions utilize the WP91683 L1 Power Supply for the AT&T Door Phone Controller external alert feature.					
APPLICATION INFORMATION	The WP91683 L1 Power Supply is the interface for providing 48VDC to operate external alert features for the AT&T Door Phone Controller such as bells, horns, lamps, strobes, and chimes.					
	The WP91683 L1 Power Supply is a plug-in power supply capable of providing 48VDC at up to 200 milliamps. The power supply operates from a 115/120 volt AC standard single or duplex receptacle.					
HOW IT WORKS	The AT&T Door Phone, in conjunction with a telephone system provides a means to alert a customer that a doorbell button ha been pressed. In response the customer can answer and talk to the door from a telephone within the customers premises.					
	The alerting device function can be provided by an external alert device powered by the WP91683 L1 Power Supply. The AT&T Door Phone's AUX. ALERT contact closure is used by the WP91683 L1 Power Supply to provide 48 Volts DC to activate the external alert device.					
INSTALLATION	These instructions apply to the use of a four-conductor modular cord only.					
	<ol> <li>Locate the WP91683 L1 Power Supply as close as pos- sible to the AT&amp;T Door Phone Controller (the nearest wall receptacle, <b>DO NOT PLUG IN YET).</b></li> </ol>					
	2. Run a standard 2-pair wire DIW or equivalent between the AT&T Door Phone Controller and a 103A connect- ing block. Connect jack on the 103A block to the jack					

marked "Control" on the WP91683 L1 Power Supply with DW4A modular cords or equivalent (see Figure E-1).

 A) Connect one end of the wire to the AT&T Door Phone Controller as follows:

Connect the black and yellow leads to the Aux. Alert terminals of the Door Phone Controller.

B) Connect the other end of the wire to the 103A connecting block. Connect the leads as follows:

On the 110-type connector, connect Terminal 2 to the black wire, and connect Terminal 6 to the yellow wire (see Figure E-1).

 Place alerter where desired. Run 2-pair DIW from alerter (signal) to power supply. Connect 4-conductor modular plugs to both ends of 2-pair wire DIW as follows:

> Position 1 - Black Wire Position 2 - Red Wire Position 3 - Green Wire Position 4 - Yellow Wire

- 4. Place one modular plug into modular jack on alerter (SIGNAL).
- 5. Place the second modular plug into the WP91683 L1 Power Supply jack marked "POWER".
- 6. Plug WP91683 L1 Power Supply into wall receptacle.
- 7. Test to see that external alert is operating by pressing the button on the AT&T Door Phone Speaker.

A standard 4-conductor modular cord set can be used for limited distances (25 feet and under) for connections between the WP91683 L1 Power Supply power jack and alerter (signal) only.



Figure E-1. Connections For Auxiliary Alert Device

### FCC Regulations Pertaining to this Equipment

FCC (PART 15) Radio Frequency Interference

The AT&T Door Phone Controller generates and uses radio frequency energy and if not installed and used in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception.

NOTE: The AT&T Door Phone Controller has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The AT&T Door Phone Controller generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the AT&T Door Phone Controller does cause interference to radio or television reception, which can be determined by turning the AT&T Door Phone Controller unit off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the radio or TV receiving antenna.
- Relocate the unit to increase the separation with respect to the radio or TV receiver or vice-versa.
- Plug the unit into a different outlet so that it and the radio or TV receiver are on different branch circuits.
- If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, "How To Identify and Resolve Radio-TV Interference Problems," helpful. This booklet was prepared by the Federal Government Printing Office, Washington, DC 20402. Stock order No. 004-000-00345-4.

#### FCC (PART 68) This equipment is registered with the Federal Communications Commission (FCC) in accordance with Part 68 of its Rules. The FCC requires that the manufacturer provide you with the following information:

#### 1. Connection and Use with Nationwide Telephone Network

The FCC requires that you connect your telephone equipment to the nationwide telephone network through a modular telephone outlet or jack. The modular telephone outlet or jack to which the equipment must be connected is a USOC RJ11C.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact your dealer for repair and(or) warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.

Registered equipment may not be used on telephone company Coin Telephone Lines. Equipment may be used with Party Lines in areas where state tariffs permit such connections and when equipment is adaptable for such use.

#### 2. Information You May Need to Supply the Telephone Company

Upon request of your local telephone company, you are required to provide them with the following information:

A. The lines to which you will connect the telephone equipment.

B. The FCC registration number and Ringer Equivalence Number (REN). Both numbers are listed on the equipment label. The REN is useful to determine how many devices you may connect to your telephone line and still have them ring when your telephone line is called. In most, but not all areas, the sum of all RENs per line should be 5 or less. You may want to contact your local telephone company. The local telephone company must also be notified upon final disconnection of the equipment from the local telephone company lines.

### Limited Warranty and Limitation of Liability

AT&T warrants to you that the product will be free from defects in material and workmanship when title passes to you. If you notify AT&T that the product has failed to operate as warranted within one year of the date title passes to you, AT&T will, at its option, repair or replace the component or components of the product that failed to operate as warranted. Any repair or replacement components may be new or refurbished and will be provided on an exchange basis. If AT&T determines that the product cannot be replaced, AT&T will refund the purchase price to you.

If you purchased the product directly from AT&T, AT&T will perform warranty repair on your premises in accordance with the terms and conditions of AT&T's "Business Day" or "Around-the-Clock" warranty plans. The details of AT&T's warranty plans may be obtained from AT&T. If you purchased the product from an authorized dealer, you will be covered by AT&T's authorized dealer warranty plan during the warranty period. Contact your authorized dealer for details of AT&T's authorized dealer warranty plan. **AT&T's obligation to repair, replace or refund as set forth above is your exclusive remedy.** 

The limited warranties provided above do not cover damages, defects, malfunctions or product failures caused by:

- Failure to follow AT&T's installation, operation or maintenance instructions;
- Unauthorized modification or alteration of the product or its components;
- Product abuse, misuse or the negligent acts of persons not under the reasonable control of AT&T;
- Actions of third parties and acts of God other than power surges (e.g., lightning).

This limited warranty applies only to the product purchased directly from AT&T or purchased directly from an authorized AT&T dealer. This limited warranty does not apply to products purchased or operated outside the United States.

You may be required to provide AT&T with proof of purchase before AT&T will perform any warranty repair or provide any warranty replacements.

EXCEPT AS SPECIFICALLY SET FORTH ABOVE, AT&T, ITS AFFILIATES, SUPPLIERS AND DEALERS MAKE NO WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

EXCEPT FOR PERSONAL INJURY, THE LIABILITY OF AT&T, ITS AFFILIATES, SUPPLIERS AND DEALERS FOR ANY CLAIM, LOSS, DAMAGE OR EXPENSE FROM ANY CAUSE WHATSOEVER, REGARDLESS OF THE FORM OF THE ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE, SHALL NOT EXCEED THE LESSER OF DIRECT DAMAGES PROVEN OR THE REPAIR OR REPLACEMENT COST OF THE SYSTEM OR THE SYSTEM'S PURCHASE PRICE. IN NO EVENT SHALL AT&T, ITS AFFILIATES, SUPPLIERS AND DEALERS BE LIABLE FOR INCIDENTAL, RELIANCE, CONSEQUENTIAL OR ANY OTHER INDIRECT LOSS OR DAMAGE (INCLUDING LOST PROFITS OR REVENUES SUSTAINED OR INCURRED IN CONNECTION WITH THE SYSTEM). THIS LIMITATION OF LIABILITY SHALL SURVIVE FAILURE OF THE EXCLUSIVE REMEDY SET FORTH IN THE LIMITED WARRANTY ABOVE.



### AT&T

# **Door Phone Controller — Option Selection**

**To Select Options: (1)** Set DIP switch location 8 to the ON position. **(2)** Dial door speaker phone number or extension. **(3)** Dial ##3. **(4)** Program any or all of the following functions, in any order:

Options	Mode Option/ Verify	Press	Listen For	Press	Listen For	Default
Delay Before	To Select Option	00	Single	000 to 255 for 0 to 255	Double	30 sec.
Door Ajar Call-back	To Verify	01	Беер	plate release stops until Door Phone Controller calls back to indicate that door is ajar	Беер	
Ring/Chime	To Select Option	10	Single Beep	24 (for 2 sec. on 4 sec. off cadence) <b>or</b>	Double Beep	2 sec./ 4 sec.
Cadence	To Verify	11	Doop	15 (for 1 sec. on 5 sec. off cadence)	2000	
Ring/Chime	To Select Option	20	Single	00 to 99 (0 to 99 second(s)	Double	30 sec.
Duration	To Verify	21	Всср	ning, chiintey	Бор	
Door Unlock	To Select Option	30	Single Been	4 digits (first digit must be	Double Beep	6736 "OPEN"
Code	To Verify	31	Беер	remaining digits can be set from 0 to 9)		
Door Unlock Duration	To Select Option	40	Single Beep	00 to 99 (door lock active time in sec.)	Double Beep	4 sec.
	To Verify	41				
Enable Door	To Select Option	50	Single Beep	<ol> <li>Enable door code</li> <li>Disable door code</li> </ol>	Double Beep	(Enabled)
	To Verify	51				
Door Ajar Mode	To Select Option	50	Single Beep	2 For callback after strike plate release only	Double Beep	2
Word	To Verify	51	Беер	3 For callback anytime door is opened		
Forced	To Select Option	60	Single Beep	010 to 255 (unit disconnects in 10 to 255 sec.)	Double Beep	120 sec.
Time-Out	To Verify	61	Boop	11 TO 10 200 000.)	воор	
Reset Options	To Select Option	70	Single	## (to restore factory default conditions)	Double Beep	N/A
Defaults	To Verify	71	Всор			
Phone Number	To Select Option	80	Single	0 to 20 numerical digits and $(* = 2 \text{ second pause}) #$	Double Beep	#
Storage Memory 1	To Verify	81	Всор	terminates entry		
Phone	To Select Option	90	Single	0 to 20 numerical digits and * (* = 2 second pause) # terminates entry	Double	#
Storage Memory 2	To Verify	91	Беер		реер	

After Selecting Options: (1) Press ##3. (2) Hang up after hearing a double beep confirmation. (3) Set DIP Decation 8 back to the OFF position, to prevent unauthorized re-programming. (See other side for DIP Switch Settings.)

8.10 in

**Door Phone Controller** 

#### **DIP Switch Settings**

NOTE: All switches are OFF when shipped from the factory.

The Door Phone Controller's operating modes are selected on the 8-position DIP switch at the front of the unit. Positions 1 through 5 are used to set up the way the Door Phone Controller will interface with your telephone equipment. Position 8 is used to access Option Selection Mode. Positions 6 & 7 are not used. Definition are given below:

- Switch 1 Selects between Trunk Access and Station Access. Trunk Access = OFF, Station Access = ON.
- CAUTION: Damage to the PBX Station Card may result if switch position #1 is incorrectly set. Double check that switch position #1 is set to ON for Station Port Access.
- Switch 2 Selects between Dedicated Trunk or Shared Trunk. This switch only has meaning when Trunk Access is selected with Switch 1. Shared Trunk = OFF, Dedicated Trunk = ON.
- Switch 3 Selects between Trunk Savor or Port Saver. This switch only has meaning when Trunk Access is selected with Switch 1 and Shared Trunk is selected with Switch 2. Trunk Saver = OFF, Port Saver = ON.
- Switch 4 Selects between Loop Start and Ground Start. This switch only has meaning when Trunk Access is selected with Switch 1. Loop Start = OFF, Ground Start = ON.
- Switch 5 Selects between Auxiliary Alert or Ringdown. This switch only has meaning when Station Access is selected with Switch 1. Auxiliary Alert = OFF, Ringdown = ON.
- Switch 6 Not used.
- Switch 7 Not used.
- Switch 8 Selects between Option Selection Mode and Normal Operation. This switch acts as a Option Selection security switch. If this switch is ON, any user can activate Option Selection Mode by keying in "##3" on a touch-tone telephone set which connects directly to the Door Phone Controller. When this switch is OFF, Option Selection Mode cannot be activated. Normal Mode = OFF, Option Selection Mode = ON.

(See other side for DTMF Option Selection.)

© 1992 AT&T All rights reserved. Printed in U.S.A. CIC# 999-500-315 0II722050-055 Issue 3, November 1992

Graphics © AT&T 1988